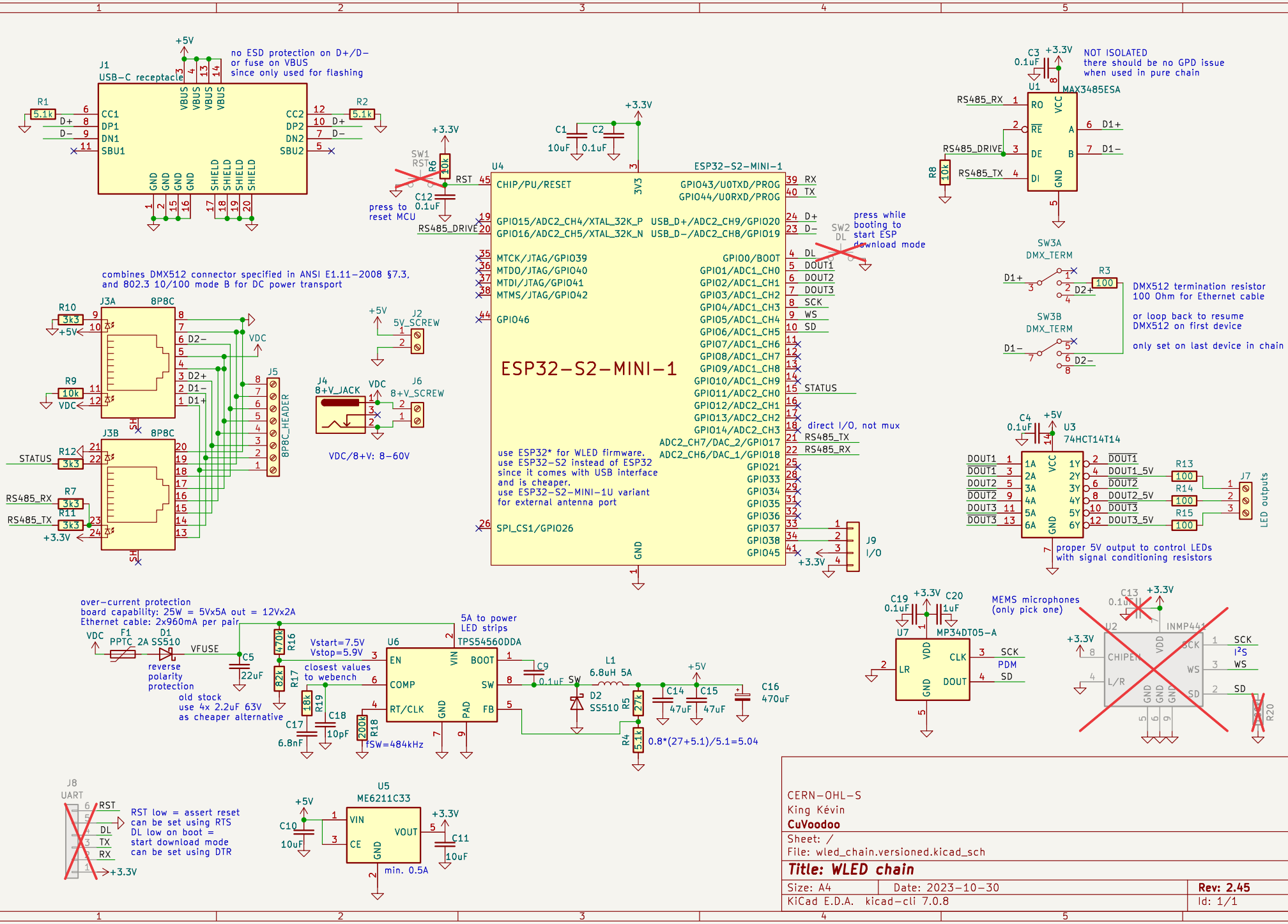
J1
USB-C receptacle
no ESD protection on D+/D-
or fuse on VBUS
since only used for flashing
ESP32-S2-MINI-1
ESP32-S2-MINI-1
use ESP32* for WLED firmware.
use ESP32-S2 instead of ESP32
since it comes with USB interface
and is cheaper.
use ESP32-S2-MINI-1U variant
for external antenna port
press to
reset MCU
press while
booting to
start ESP
download mode
direct I/O, not mux
NOT ISOLATED
there should be no GPD issue
when used in pure chain
MAX3485ESA
combines DMX512 connector specified in ANSI E1.11-2008 §7.3,
and 802.3 10/100 mode B for DC power transport
DMX512 termination resistor
100 Ohm for Ethernet cable
or loop back to resume
DMX512 on first device
only set on last device in chain
VDC/8+V: 8-60V
74HCT14T14
proper 5V output to control LEDs
with signal conditioning resistors
LED outputs
over-current protection
board capability: 25W = 5Vx5A out = 12Vx2A
Ethernet cable: 2x960mA per pair
reverse
polarity
protection
old stock
use 4x 2.2uF 63V
as cheaper alternative
5A to power
LED strips
TPS54560DDA
Vstart=7.5V
Vstop=5.9V
closest values
to webench
fSW=484kHz
0.8*(27+5.1)/5.1=5.04
MEMS microphones
(only pick one)
MP34DT05-A
INMP441
RST low = assert reset
can be set using RTS
DL low on boot =
start download mode
can be set using DTR
ME6211C33
min. 0.5A
CERN-OHL-S
King Kévin
CuVoodoo
Sheet: /
File: wled_chain.versioned.kicad_sch
Title: WLED chain
Size: A4
Date: 2023-10-30
Rev: 2.45
KiCad E.D.A. kicad-cli 7.0.8
Id: 1/1